

PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) 50N3215.01																		
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on <u>10/08/2009</u> Signature <u>/Marjorie Scariati/</u> Typed or printed name <u>Marjorie Scariati</u>	Application Number 10/790,615	Filed 03/01/2004																		
	First Named Inventor Ian Charles Matthews																			
	Art Unit 2621	Examiner Hung Q. Dang																		
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <table border="0"><tr><td><input type="checkbox"/> applicant/inventor.</td><td><u>/Karin L. Williams/</u></td></tr><tr><td></td><td>Signature</td></tr><tr><td><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</td><td><u>Karin L. Williams</u></td></tr><tr><td></td><td>Typed or printed name</td></tr><tr><td><input type="checkbox"/> attorney or agent of record. Registration number _____</td><td><u>908-518-7700</u></td></tr><tr><td></td><td>Telephone number</td></tr><tr><td><input checked="" type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 <u>36721</u></td><td><u>10/08/2009</u></td></tr><tr><td></td><td>Date</td></tr></table> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p> <table border="1"><tr><td><input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.</td></tr></table>				<input type="checkbox"/> applicant/inventor.	<u>/Karin L. Williams/</u>		Signature	<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)	<u>Karin L. Williams</u>		Typed or printed name	<input type="checkbox"/> attorney or agent of record. Registration number _____	<u>908-518-7700</u>		Telephone number	<input checked="" type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 <u>36721</u>	<u>10/08/2009</u>		Date	<input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.
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This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Reasons for requesting pre-appellate review:

The Claim Rejections Under 35 U.S.C. §103(a) are Erroneous

Claims 14-18, 20-21 and 23-27 are pending in the application. Claims 14 and 21 are independent.

Claims 14-15, 21 and 23 were rejected under 35 USC 103(a) as being unpatentable over US Patent 5,559,808 (Kostreski et al.); dependent Claims 16 and 25 were rejected as being unpatentable over Kostreski in view of US Patent 6,301,248 (Jung et al.); dependent Claims 17-18 and 26-27 were rejected as being unpatentable over Kostreski as applied to Claims 14-15 and 21-23 and further in view of US 5,555,097 (Joung et al.); and dependent Claims 20 and 24 were rejected as being unpatentable over Kostreski as applied to Claims 14-15 and 21-23 and further in view of US 5,999,690 (Ro et al.) and US Patent 4,712,175 (Torri et al.). Each of these rejections is respectfully traversed and reconsideration is requested.

Independent Claim 14 is directed to a method for processing a plurality of signals including - receiving a plurality of signals, having a plurality of different formats, *at a single source interface*, wherein at least a first signal, a second signal and a third signal are received at said single source interface, routing the first signal, the second signal and the third signal from the single source interface to one or more selected devices, converting the first signal, routed from the single source interface, the first signal being an analog signal, to a desired format, converting the second signal, routed from the single source interface, the second signal being a digital signal, to the desired format, demultiplexing the third signal in the desired format, the third signal having an audio component and a video component; packetizing the first, second and third signals, and multiplexing the first, second and third signals into a single transport stream.

Independent Claim 21 is directed to an apparatus for processing a plurality of signals, including *a single source interface having one or more input terminals to receive the plurality of signals having a plurality of different formats, wherein at least a first signal, a second signal and a third signal are received at said single source interface*, a first converter to convert the first signal (an analog signal) among the plurality of signals to a desired format, a second converter to convert the second signal (a digital signal) among the plurality of signals to the desired format, a demultiplexer to demultiplex the third signal in the desired format among the plurality of signals,

the third signal having an audio component and a video component, a packetizer coupled to the demultiplexer, and the first and second converters, the packetizer to packetize the first, second and third signals; and a formatter coupled to the packetizer, the formatter to multiplex the first, second and third signals into a single transport stream.

Applicants recognized that while a large number of analog and digital signals are available for home use, not all signals are standardized in a common format, they are transmitted with different formats, requiring different types of receivers or devices (see page 1, lines 10-11 and 26-31). As explained at least at page 5, lines 2-4 and 20-33 of Applicant's specification as filed, "*source interface 105 accepts signals from multiple sources, e.g., analog video signals...digital video signals...[r]egardless of the signal source, the signals input to source interface 105 have identifiers that allow source interface 105 to select and route specific signals to desired destinations*", and "*signals of different formats from different sources can be simultaneously recorded and accessed for subsequent use*". By inputting all signals to a single source interface, and routing selected signals to *appropriate devices for processing*, the proposed method/apparatus provides a solution to the problems noted.

Kostreski is directed to "simulcasting digital video programs" --and attempts to address problems raised by signal blockage and "multi-path reflections" (col. 4, lines 28-39).

Kostreski does not teach or suggest (at least) a method or apparatus in which "*digital signals in a format different than the desired format* are first *converted to the desired format* by a converter before being transmitted to the buffer" (see e.g., Applicants' specification page 3, lines 24-27). The Action directs Applicants to "col. 13, lines 57-63 and col. 14, lines 1-10" of Kostreski as support for teaching this element. However, these sections of Kostreski cited in the first Action describe only converting *analog* information into compressed digital data form.

In response to the argument above, in the Final Office Action the Examiner takes the position that "although Kostreski *does not disclose such a feature*...it is obvious to modify the teachings of Kostreski to also receive non-MPEG digital signals". The reasoning presented by the Examiner is that "if program signals that have been digitized are received from the input, *the digitization steps can be bypassed and the method can broadcast program signals that have been digitized as well* -- the utility of the method would be enhanced accordingly" (emphasis added herein).

Absolutely no additional support is provided in the teachings of Kostreski or any other cited reference for the ‘alleged obviousness’ of this jump in reasoning and its application to the pending claims.

Applicant respectfully submits that only the very own teachings of Applicant’s specification would allow this stretch of imagination and conclusion to be obtained. In addition, Kostreski very specifically states only that “the MPEG multiplexer 12 may receive digitized and compressed (MPEG) video from other sources 11” (emphasis added) – this is very specifically limited to MPEG, and teaches away from what the Examiner deems ‘obvious to convert digital signals *in a format different than the desired format*’. In addition, in the Final Action the Examiner takes “Official Notice that receiving and converting a digital signal into an MPEG II format has been well known in the art” – Applicant traverses this assertion at least as much as it attempts to read upon and/or render obvious Applicant’s claimed method for processing a plurality of signals, as defined by independent Claim 14, that *includes* receiving a plurality of signals, having a plurality of different formats, at a single device single source interface , and “converting ***digital signals in a format different than the desired format, to the desired format***, by a converter before being transmitted to the buffer”.

*Even if it is known to convert a digital signal into an MPEG II format, it does not provide any teaching or suggestion to modify the teachings of Kostreski to include Applicant’s specific recited claims that include a method or apparatus for processing a plurality of signals in which “digital signals in a format different than the desired format are first **converted to the desired format** by a converter before being transmitted to the buffer”.*

In addition, Applicants again respectfully submit that Kostreski also fails to teach or suggest “*demultiplexing the third signal in the desired format*, having an audio component and a video component”. The Action directs Applicants to “column 14, lines 43-49; column 15, lines 25-35” of Kostreski for support of this element – however the first section cited, column 14, lines 43-49, describes only how the “MPEG II standard provides a standardized format for packetizing compressed audio and video information and for transporting other data”.

More specifically, lines 43-45 of column 14 of Kostreski recite “under the MPEG II standard, incoming *individual video signals* and *related audio signals* are encoded and packetized into *respective* Video and Audio Packetized Elementary Streams (PES)”. Kostreski provides no indication that these packetized streams are demultiplexed after being received at a single source interface – rather, an “elementary stream (ES)” as defined by MPEG communication protocol is usually the output of an audio *or* video encoder. An ES contains only one kind of data, e.g. audio, video or closed caption - an elementary stream is often referred to as “elementary”, “data”, “audio”, or “video” bitstreams or streams. The format of the elementary stream depends upon the codec or data carried in the stream.

The second section cited, column 15, lines 25-35, describes only how the MPEG multiplexer 12 (see Fig. 6) “may receive digitized and compressed (MPEG) video from other sources 11”. These sections/statements do not teach or suggest a method/apparatus, as claimed by Applicants, in which a received “third signal”, that is in the desired format, is “demultiplexed”, prior to the steps of packetizing “the first, second and third signals”, and then “multiplexing the first, second and third signals into a single transport stream”.

The Examiner states in the Final Action “obviously the separation of the MPEG input stream into video and audio PES streams is in fact the demultiplexing of the third stream” – for the foregoing reasons, Applicant respectfully submits that Kostreski does not teach or suggest “the separation of the MPEG input stream into video and audio PES streams”.

For at least the foregoing reasons, Applicant respectfully submits that each of independent Claims 14 and 21 is patentable over the teachings of Kostreski.

The limitations of dependent Claim 19 were previously added to independent Claim 14 (response filed 4/22/09). The Final Action took the position that the step of “routing the first signal, the second signal and the third signal from the single source interface to one or more selected devices” is shown in Kostreski at “Fig. 6; col. 13, lines 57-63; col. 14, lines 1-10; col. 15, lines 25-34”. Applicant submits that Kostreski, and the particular sections cited by the Examiner, provides absolutely *no teaching or suggestion of* “‘routing’ signals to one or more selected devices”. Rather, Kostreski recites that, “typically 20-25 such channels are necessary”, and “the headend 10 therefore typically comprises 20-25 of the Sources S1 to SN” (col. 13; lines 54-59). Again, there is no teaching of ‘routing’ from an interface to a particular selected device in Kostreski.

With regard to the recitation in dependent Claim 20 of a “selector to select the first signal, the second signal and the third signal from among the plurality of signals”, the Action takes the position that “Torri discloses a selector comprising three independent selectors to provide three independent outputs” and that it would be obvious to incorporate such teachings into the method of Kostreski as modified by Ro “*so that signal inputs can be grouped into different categories depending on format and nature of the signals in order to share processing resources more efficiently*”. Again, since Kostreski fails to even suggest a method/system in which “***digital signals in a format different than the desired format*** are first ***converted to the desired format*** by a converter before being transmitted to the buffer” – and – “*demultiplexing a signal in the desired format, having an audio component and a video component*” –the ‘motivation’ suggested in the Action does not apply. Finally, dependent Claim 20 was previously amended to recite a *single* selector – further defining over the teachings of Torri – this was not addressed in the Final Action (which again noted that “Torri disclose a selector comprising three independent selectors” (page 7 of Final Action).

Dependent Claims 15-18, 20 and 23-27 are believed to be clearly patentable for all of the reasons indicated above with respect to Claims 14 and 21, one or the other from which they depend, and even further define over the cited references by reciting additional distinguishing limitations.

Reconsideration and withdrawal of each of the outstanding rejections are accordingly requested.